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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,885	08/04/2000	Zhengxiang Ma	11-10	1909

7590 07/06/2004

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EXAMINER

MUNOZ, GUILLERMO

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 07/06/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/631,885

Applicant(s)

MA ET AL.

Examiner

Guillermo Munoz

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-35 is/are rejected.
- 7) ☒ Claim(s) 12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2634

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments, see Amendment, filed 11 April 2004, with respect to the rejection(s) of claim(s) 1-35 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dajar (US Patent 6,539,209 B1) and Winters (cited in IDS filed March 1, 2002).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: The steps of forming a phase-shifted first diversity-encoded signal and a phase-shifted second diversity-encoded signal.

Regarding claim 10, see claim 9.

Regarding claim 11, see claim 9.

Regarding claim 23, see claim 9.

Regarding claim 33, see claim 9.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 14-22, 24-32, and 34-35 are rejected under 35 U.S.C. 103(a) as being obvious over Dajer et al. in view of Winters.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Art Unit: 2634

Regarding claim 1, Dajer et al. disclose a Code-Division, Multiple-Access Base Station Having Transmit Diversity which teaches all the claimed subject matter "sharing the amplification...between the at least two amplifiers" in claim 1 as follows, except Dajer et al. does not teach sharing the amplification of the non-transmit diversity signal between at least two amplifiers.

Winters discloses a base station that uses Butler matrixes to evenly split a signal among several amplifiers and having the signal input into each input port of the first Butler-matrix coming out from only the respective corresponding output port of the second Butler-matrix, note col. 2, lines 10-53.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the existing base station assembly of Dajer et al. with Winter's teaching of using multiple amplifiers to amplify an input signal for transmission, since Winter suggest on Col. 2, line 3-5, that the sharing of amplifiers would decrease the required maximum power of the amplifiers.

Regarding claim 2, Dajer et al. further teach the claimed subject matter in Col. 5, lines 15-17.

Regarding claim 3, Dajer et al. further teach the claimed subject matter in Col. 1, lines 50-67.

Regarding claim 4, Dajer et al. further teach the claimed subject matter in Col. 1, lines 50-67.

Regarding claim 5, Dajer et al. further teach the claimed subject matter in Col. 1, lines 50-67.

Regarding claim 6, Winters further teach the claimed subject matter, note Fig. 4, ref. 419, and Col. 8, lines 16-31.

Regarding claim 7, see claim 4.

Regarding claim 8, see claim 1.

Regarding claim 14, Dajer et al. further teach the claimed subject matter in Fig. 1A elements 28 and 30.

Regarding claim 15, see claim 3.

Regarding claim 16, see claim 5.

Regarding claim 17, see claim 6.

Regarding claim 18, see claim 1.

Regarding claim 19, Dajer et al. further teach the claimed subject matter, note Fig. 1B, element 18.

Regarding claim 20, see claim 19. Further, Winter teaches the use of first and second hybrid combiners, note Fig. 4, element 411.

Regarding claim 21, Winter further teach the claimed subject matter, note Fig. 3.

Regarding claim 22, see claim 6.

Regarding claim 24, see claim 1.

Regarding claim 25, see claim 19.

Regarding claim 26, see claim 20.

Regarding claim 27, see claim 21.

Regarding claim 28, see claim 22.

Regarding claim 29, see claim 23.

Art Unit: 2634

Regarding claim 30, Dajer et al. further teach the claimed subject matter in figure 1B, elements 95-99.

Regarding claim 31, Winters further teach the claimed subject matter "receiver" by the inherency of the operation of the uplink channel, note Col. 3, lines 29-40.

Regarding claim 32, see claim 2.

Regarding claim 34, see claim 19.

Regarding claim 35, see claim 26.

### ***Claim Objections***

Claims 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

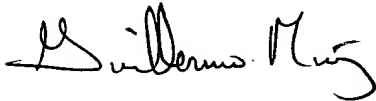
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Munoz whose telephone number is 703-305-4224. The examiner can normally be reached on Monday-Friday 8:30a.m-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2634

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



GM  
June 25, 2004



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